Subject: Phase question on DE 250 on 4Pi crossover Posted by Russellc on Mon, 30 Mar 2009 22:07:39 GMT View Forum Message <> Reply to Message

Wayne, I notice on the 4 Pi crossover(for DE 250 ) that the schematic shows that the black post of DE 250 should be hooked up to the 1+ connection, while the red post of DE 250 should be hooked up to 1-.Further, I notice that is just the opposite for the same crossover using PSD 2002. Does the DE 250 produce a forward wave when the positive signal is connected to the black post?I was wondering, as I am using that driver in my Econowave speaker, and will be using it in the 4 PI w/ 2225H. I have found the DE 250 to be more transparent, but not very engaging for lack of a better word. Perhaps I need to flip polarity? Realizing it is already flipped in that second order crossover, so maybe it needs unflipped?Confused,Russellc

Subject: Re: Phase question on DE 250 on 4Pi crossover Posted by Wayne Parham on Mon, 30 Mar 2009 22:36:07 GMT View Forum Message <> Reply to Message

That's right, the acoustic phase of the DE250 is reversed with respect to the PSD2002. I'm not sure if the diaphragm is physically moving in the opposite direction of if it is an acoustic thing, but I designed the crossovers with actual measurements, so I am confident in the results. As an aside, most compression drivers are wired so that positive voltage results in negative pressure. The diaphragm moves "forward" out of the gap, which is away from you when looking down the throat of the device.